

CLAIMS

1. A mobile station (100) for use in a radio communication system (50) comprising a plurality of base stations (200), the mobile station (100) comprising transmitter means (110), receiver means (120) for receiving signals including transmit power control commands from the plurality of base stations (200), control means (150) adapted to compare the amplitude of the received transmit power control commands with a reliability threshold and adapted to vary the transmit power of the transmitter means (110) in response to the comparison, wherein the control means (150) is further adapted to vary the reliability threshold according to a function of one or more of:

the number of base stations (200) from which the mobile station (100) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period;

a measured characteristic of signals received by the mobile station (100).

2. A mobile station (100) as claimed in claim 1, wherein the measured characteristic of signals received by the mobile station (100) is a measured characteristic of the received transmit power commands.

3. A mobile station as claimed in claim 1 or 2, wherein the control means is adapted to apply different reliability thresholds to the transmit power control commands received from the different base stations.

4. A radio communication system (50) comprising a plurality of base stations (200) and at least one mobile station (100), each base station (200) having a receiver means (220) for receiving signals from the mobile station (100) and a transmitter means (210) for transmitting signals including transmit power control commands to the mobile station (100), and the mobile station (100) having transmitter means (110), receiver means (120) for receiving

signals including transmit power control commands from the plurality of base stations (200), control means (150) adapted to compare the amplitude of the received transmit power control commands with a reliability threshold and adapted to vary the transmit power of the transmitter means in response to the comparison, wherein the control means is further adapted to vary the reliability threshold according to a function of one or more of:

the number of base stations (200) from which the mobile station (100) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period;

a measured characteristic of the signals received by the mobile station (100).

5. A radio communication system (50) as claimed in claim 4, wherein the control means (150) is adapted to apply different reliability thresholds to the transmit power control commands received from the different base stations (200).

6. A method of operating a radio communication system (50) comprising:

transmitting a signal from a mobile station (100);

receiving the signal at a plurality of base stations (200);

at each base station (200), in response to receiving the signal, deriving transmit power control commands and transmitting a signal comprising the transmit power control commands; and

at the mobile station (100), receiving the transmit power control commands from the plurality of base stations (200), comparing the amplitude of the received transmit power control commands with a reliability threshold, and adjusting the transmit power of a mobile station transmitter (110) in response to the comparison, further comprising deriving the reliability threshold according to a function of one or more of:

the number of base stations (200) from which the mobile station (100) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period;

5 a measured characteristic of the signals received by the mobile station (100).

7. A method as claimed in claim 6, comprising applying different reliability thresholds to the transmit power control commands received from the different base stations (200).
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8. A mobile station (100) for use in a radio communication system (50) comprising a plurality of base stations (200), the mobile station (100) comprising transmitter means (110), receiver means (120) for receiving signals including transmit power control commands from the plurality of base stations (200), control means (150) adapted to compare the amplitude of the received transmit power control commands with a reliability threshold and adapted to vary the transmit power of the transmitter means in response to the comparison, wherein the control means (150) is further adapted to scale by a scale factor the amplitude of the received transmit power control commands prior to the measurement, and wherein the control means is further adapted to vary the scale factor according to a function of one or more of:
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the number of base stations (200) from which the mobile station (100) receives transmit power control commands;

25 the number of commands to increase and/or decrease transmit power received in a preceding time period;

a measured characteristic of the signals received by the mobile station (100).

30 9. A mobile station (100) as claimed in claim 8, wherein the measured characteristic of signals received by the mobile station (100) is a measured characteristic of the received transmit power commands.

10. A mobile station (100) as claimed in claim 8 or 9, wherein the control means (150) is adapted to apply different reliability thresholds to the transmit power control commands received from the different base stations
5 (200).

11. A radio communication system (50) comprising a plurality of base stations (200) and at least one mobile station (100), each base station (200) having a receiver means (220) for receiving signals from the mobile station
10 (100) and a transmitter means (210) for transmitting signals including transmit power control commands to the mobile station (100), and the mobile station (100) having transmitter means (110), receiver means (120) for receiving signals including transmit power control commands from the plurality of base stations (200), control means (150) adapted to compare the amplitude of the
15 received transmit power control commands with a reliability threshold and adapted to vary the transmit power of the transmitter means in response to the comparison, wherein the control means is further adapted to scale by a scale factor the amplitude of the received transmit power control commands prior to the measurement, and wherein the control means (150) is further adapted to
20 vary the scale factor according to a function of one or more of:

the number of base stations (200) from which the mobile station (100) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period;

25 a measured characteristic of the signals received by the mobile station (100).

12. A radio communication system (50) as claimed in claim 11, wherein the control means (150) is adapted to apply different reliability
30 thresholds to the transmit power control commands received from the different base stations (200).

13. A method of operating a radio communication system (50) comprising:

transmitting a signal from a mobile station (100);

receiving the signal at a plurality of base stations (200);

5 at each base station (200), in response to receiving the signal, deriving transmit power control commands and transmitting a signal comprising the transmit power control commands;

at the mobile station (100), receiving the transmit power control commands from the plurality of base stations (200), scaling by a scale factor
10 the received transmit power control commands, comparing the amplitude of the scaled received transmit power control commands with a reliability threshold and adjusting the transmit power of the mobile station transmitter in response the comparison, further comprising deriving the scale factor according to a function of one or more of:

15 the number of base stations (200) from which the mobile station (100) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period;

a measured characteristic of the signals received by the mobile station
20 (100).

14. A method as claimed in claim 13, comprising applying different reliability thresholds to the transmit power control commands received from the different base stations (200).